

Title (en)

QUICK IDENTIFICATION OF DANGEROUS OR ENDANGERED OBJECTS IN THE SURROUNDINGS OF A VEHICLE

Title (de)

SCHNELLE ERKENNUNG GEFÄHRLICHER ODER GEFÄHRDETER OBJEKTE IM UMFELD EINES FAHRZEUGS

Title (fr)

RECONNAISSANCE RAPIDE D'OBJETS DANGEREUX OU MENACÉS DANS L'ENVIRONNEMENT D'UN VÉHICULE

Publication

**EP 3818466 B1 20240228 (DE)**

Application

**EP 19729278 A 20190606**

Priority

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Abstract (en)

[origin: WO2020007567A1] A method (100) for identifying potentially dangerous or endangered objects (41-43) in the surroundings (2) of a vehicle (1) includes the steps of: • detecting (110) a region (2a) of the surroundings (2) using at least one event-based sensor (3), wherein the event-based sensor (3) comprises light-sensor pixels (31) and wherein a relative change of the light intensity incident on a pixel (31) by at least a predetermined percentage causes the sensor (3) to output an event (31a) assigned to this pixel (31); • assigning (120) events (31a) output by the sensor (3) to objects (41-43) in the region (2a); • analysing (130) events (31a) assigned to an object (41-43) in respect of current movements (41a-43a) of the object (41-43) for at least one object (41-43) which has events (31a) assigned thereto; • ascertaining (140) an imminent movement (41b-43b) of the object (41-43) and/or an imminent change in state (41c-43c) of the object (41-43) from the current movements (41a-43a). The invention also relates to an associated computer program.

IPC 8 full level

**G06V 20/58** (2022.01); **G06V 10/10** (2022.01)

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Citation (examination)

- DE 102008062915 A1 20100701 - CONTINENTAL SAFETY ENGINEERING [DE]
- PATRICK LICHTSTEINER ET AL: "A 128128 120 dB 15 s Latency Asynchronous Temporal Contrast Vision Sensor", IEEE JOURNAL OF SOLID-STATE CIRCUITS, IEEE, USA, vol. 43, no. 2, 1 February 2008 (2008-02-01), pages 566 - 576, XP011200748, ISSN: 0018-9200, DOI: 10.1109/JSSC.2007.914337

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